

June 5, 2017

Marlene H. Dortch Secretary Federal Communications Commission 445 12th Street, SW Washington, DC 20510 Jeffrey A. Marks Government Relations Nokia

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Email:

jeffrey.marks@nokia.com

Re: Notice of Ex Parte Presentation, Use of Spectrum Bands Above 24 GHz for Mobile Radio Service, et al., GN Docket No. 14-177; IB Docket Nos. 15-256 and 97-95; RM-11664; WT Docket No. 10-112

Dear Ms. Dortch:

On June 2, 2017, Amitava Ghosh, Mark Cudak, Prakash Moorut and the undersigned, all of Nokia, had a series of four meetings with Commission staff (listed below) to discuss Nokia's commitment to 5G in bands below 50 GHz, as well as the promise of the higher-mmWave bands, including the 70/80 GHz Bands. The attached presentation served as the basis of our discussion.

In each meeting, Nokia highlighted the opportunities for large spectrum blocks and global harmonization in the 70/80 GHz Bands. Nokia further demonstrated that simulations in the 70/80 GHz Bands achieve similar performance – including similar geographic service area covered with each base station – to lower mmWave bands. This performance is achieved largely by increasing the number of antenna elements included in each base station, and without increasing the form factor of the base station equipment. Nokia also believes that mobile broadband coexistence with incumbent services is achievable.

Nokia therefore urges the Commission to authorize flexible use licenses that would permit fixed and mobile use in the 70/80 GHz Bands. At the same time, we understand there is a possibility that the Commission may move forward more quickly with other bands being considered in this proceeding. If that is the case, Nokia respectfully requests that the 70/80 GHz Bands remain under consideration as a critical part of the 5G spectrum pipeline in the U.S. and globally.

Please contact the undersigned with any questions in connection with this submission.

Respectfully submitted,

/s/ Jeffrey A. Marks

Jeffrey A. Marks

## Attachment

cc: Office of Chairman Ajit Pai

Rachael Bender

Office of Commissioner Mignon Clyburn

Daudeline Meme

Office of Commissioner Michael O'Rielly

Erin McGrath

Wireless Telecommunications Bureau/Office of Engineering and Technology

Julius Knapp

Bahman Badipour

Stephen Buenzow

Brian Butler

Martin Doczkat

Rashmi Doshi

Michael Ha

Tim Hilfiger

Ira Keltz

Nicholas Oros

John Schauble

Blaise Scinto

Janet Young